# MPMC BEY#ND ENERGY

## MODEL: MC180(S)-1

Powered by Cummins

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### **Applicable Standards**

- ISO 8528-5:2018
- GB/T2820.5-2009
- CE

General Information		Prime power	Standby power
Rated Power (kVA)		180	200
Power Rating (kW)		144	160
Frequency (Hz)		50	
Engine Model		6CTA8.3-G2	
Engine Speed (RPM)		1500	
Phase		3	
PF		0.8	
Control System		Digital	
Rated voltage (V)		400/230 (According to customer requirements)	
Fuel tank capacity operating time		≥ 8h @ 75% load	
Fuel Consumption (L/h)	110% load	48	
	100% load	42	
	75% load	31	
	50% load	21	
		MPMC	

Dimension and Weight					
Model	MC180-1 Open type	MC180S-1 Silent type			
Length (L) mm	2750	3400			
Width (W) mm	850	1130			
Height (H) mm	1550	1930			
Dry weight (kg)	1640	2480			
Tank capacity (L)	330	435			
The loading capacity (40'HC)	8 units	6 units			

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7<mark>w</mark>

Note: Specifications and illustrations are subject to revision without notice.

7**w** 

## **Environmental Conditions**

- Ambient temperature: +5°C~+40°C
- Altitude: ≤1000m

Remark: If your conditions are different from the above, please contact our sales.

## **Factory Inspection**

- Complete design and quality inspection
- 0%, 25%, 50%, 75%, 100%, 110% load test.
- Function test.
- Protection test

### **Painting Process**

- MPMC has the most advanced automatic spraying / powder coating production line, and is equipped with various sandblasting equipment to ensure higher quality.
- Canopy painting: Henkel pretreatment process and world famous brand AkzoNobel powder.
- Base Frame painting: Sandblasting process and AkzoNobel powder (Hempel paint is optional).



## **Engine Specifications**

Engine model & manufacturer		6CTA8.3-G2 (Cummins)
Emission Certification		MEP STAGE I
Number of cylinders		6
Cylinder arrangement		In-line
Cycle		Four stroke
Aspiration		Turbocharged
Bore x Stroke		114 x 135 mm
Displacement		8.3 L
Compression ration		17.3:1
Prime power /speed		163 kW/1500 rpm
Standby power /speed		180 kW/1500 rpm
Speed governor		Electronic
Cooling system		Forced Water Cooling Cycle
Frequency droop		≤ 3%
Total lubrication system capacity		27.6 L
Coolant capacity (engine o	nly)	12.3 L
Fuel consumption	100% load	212 g/kWh @1500 rpm
Starter motor		DC 24V
Charge alternator		DC 24V
<ul> <li>Heavy duty diesel engine</li> </ul>		<ul> <li>Starter battery (with lead acid) including rack and cables</li> </ul>
<ul> <li>Anti-vibration mount</li> </ul>		<ul> <li>Flexible fuel connection hoses</li> </ul>
<ul> <li>Replaceable fuel filter, oil filter &amp; air filter</li> </ul>		<ul> <li>Exhaust silencer and bellows</li> </ul>
<ul> <li>Cooling radiator and fan</li> </ul>		<ul> <li>Operation manuals and circuit diagram documents</li> </ul>

## **Alternator Specifications**

Alternator	
Number of phase	3
Power factor (Cos Phi)	0.8
Poles	4
Insulation type	H class
Winding Pitch	2/3
IP rating	IP23
Bearing	Single bearing
Voltage regulator	A.V.R
Coupling	Flexible disc

# MPMC BEY#ND ENERGY

## **Control Panel**

## DSE 4520 MKII

#### Auto start and auto mains failure control module (Alternator frequency & can speed sensing)



## **Key features**

- Auto Start and AMF mode in one module.
- J1939-75 support and CAN alarm ignore function.
- Alternator frequency & CAN speed sensing in one variant.
- Largest back-lit icon display in its class.
- Heated display option.
- Real time clock provides accurate event logging.
- Fully configurable via the fascia or PC using USB communication.
- Extremely efficient power save mode.
- 3 phase generator sensing.
- 3 phase mains (utility) sensing
- Compatible with 600 V ph to ph nominal systems.
- Generator/load power monitoring (kW, kVA, kVar, PF).
- Accumulated power monitoring (kWh, kVAh, kVarh).
- Generator overload protection.
- Generator/load current monitoring and protection.
- Fuel and start outputs (configurable when using CAN).
- 4 configurable DC outputs.
- 3 configurable analogue/digital inputs

### Key benefits

- Ultimate size to feature ratio.
- Automatically transfers between mains (utility) and generator.
- Hours counter provides accurate information for monitoring and maintenance periods.
- User-friendly set-up and button layout for ease of use.
- Multiple parameters are monitored simultaneously which are clearly displayed on the largest back-lit icon display in its class.
- The module can be configured to suit a wide range of applications.
- Compatible with a wide range of CAN engines including Tier 4.
- IP65 rating (with optional gasket) offers increased resistance to water ingress.
- 4 configurable digital inputs.
- Configurable staged loading outputs.
- 3 engine maintenance alarms.
- Engine speed protection.
- Engine hours counter.
- Engine pre-heat.
- Engine run-time scheduler.
- Engine idle control for starting & stopping.
- Tier 4 engine instrumentation screens.
- Battery voltage monitoring.
- Start on low battery voltage.
- Configurable remote start input.
- 1 alternative configuration.
- Comprehensive warning, electrical trip or shutdown protection upon fault condition.
- LCD alarm indication.
- Event log (50)

## Options

Engine	Alternator	Fuel System	Generating Set
<ul> <li>Water Jacket Preheater</li> <li>Oil Preheater</li> <li>Oil manual pump</li> </ul>	<ul> <li>PMG excitation</li> <li>Space heater</li> <li>Winding temperature measuring</li> </ul>	<ul> <li>12 / 24 hour base tank</li> <li>Bunded fuel tank</li> <li>External fuel tank</li> <li>Automatic fuel feeding</li> <li>Switch between external tank and base tank (three-way valve)</li> </ul>	<ul> <li>Deepsea, ComAp, Smartgen etc. controller</li> <li>Trailer</li> <li>Tools with the machine</li> </ul>





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